

Mechanical Engineering Academy of Distinguished Alumni

Arumugam Manthiram, Ph.D.

Honorary Mechanical Engineer, 2019

BS, Madurai University, 1974 MS, Madurai University, 1976 Ph.D., Indian Institute of Technology-Bombay, 1980

Director, Academic Program
The University of Texas at Austin

Arumugam Manthiram is currently the Cockrell Family Regents Chair in Engineering and Director of the Texas Materials Institute and the Materials Science and Engineering Program at The University of Texas at Austin (UT-Austin). He received his Ph.D. degree in chemistry from the Indian Institute of Technology Madras in 1981. After working as a postdoctoral researcher at the University of Oxford and at UT-Austin with Professor John Goodenough, he became a faculty member in the Department of Mechanical Engineering at UT-Austin in 1991. Dr. Manthiram's research is focused on clean energy materials and technologies, including batteries, fuel cells, and supercapacitors. He has authored more than 760 journal articles with 55,000 citations and an h-index of 117. He is a globallyrecognized expert in battery technologies, and he has given more than 300 invited/keynote/ plenary talks around the world. He has provided research training to more than 200 students and postdoctoral fellows, including the graduation of 58 Ph.D. students and 26 M.S. students. His former students and postdoctoral fellows are well-placed around the world in academia, national labs, and industry, including two vice-presidents at LG Chem, South Korea. Two of his former Ph.D. students led the design and development of the first-generation of lithium-ion battery pack for Chevy Volt. He

currently directs a large research group with about 30 graduate students and postdoctoral fellows with a research funding of close to \$2 million per year. On a 5-point scale, his average instructor ratings by undergraduate and graduate students are consistently 4.5 +/- 0.1 for the courses he has taught throughout his career from 1991 at UT-Austin.

Dr. Manthiram is the Regional (USA) Editor of Solid State Ionics, Co-Editor of Ceramics in Modern Technologies, and an Associate Editor of Energy and Environmental Materials. He is a Fellow of six professional societies, including Materials Research Society, Electrochemical Society, American Ceramic Society, Royal Society of Chemistry, American Association for the Advancement of Science, and World Academy of Materials and Manufacturing Engineering. He received the university-wide (one per year) Outstanding Graduate Teaching Award in 2012, the Battery Division Research Award from the Electrochemical Society in 2014, the Distinguished Alumnus Award of the Indian Institute of Technology Madras in 2015, the Billy and Claude R. Hocott Distinguished Centennial Engineering Research Award in 2016, and the Da Vinci Award in 2017. He is a Web of Science Highly Cited Researcher in 2017 and 2018, which represents top 1% of the highly cited researchers globally.